In the Claims:

- 1. (Currently Amended) An improved ultrasonic imaging system constructed to facilitate imaging of at least a portion of a jaw, the system comprising:
 - (a) a probe, said probe comprising at least one <u>curved wand whereupon</u> each is mounted a <u>curved</u> array of ultrasonic transducers, <u>wherein at least one said curved wand is designed and constructed to be insertable into a mouth of a patient;</u>
 - (b) a position locator module designed and constructed to be capable of defining a location of said probe in six degrees of freedom and transmitting said definition to a central processing unit; and
 - (c) said central processing unit capable of;
 - (i) receiving from said probe digital data from each of said ultrasonic transducers in <u>each</u> said <u>curved</u> arrays;
 - (ii) further receiving from said position locator a location of said probe; and
 - (iii) transforming said digital data into an image of said at least a portion of a jaw.
- 2. (Original) The system of claim 1 wherein said image is a three dimensional image.
- 3. (Currently Amended) The system of claim 1, wherein said probe is a mandibular probe designed and constructed to facilitate imaging of at least a portion of a lower jaw and includes:
 - (i) a first <u>said curved</u> array of ultrasonic transducers mounted upon a first <u>said curved</u> wand, said first <u>curved</u> array of ultrasonic transducers positionable distal to the lower jaw and outside of <u>asaid</u> mouth;
 - (ii) a second <u>said curved</u> array of ultrasonic transducers, said second <u>curved</u> array of transducers mounted upon a second <u>said curved</u> wand, said second <u>curved</u> array of ultrasonic transducers positionable proximal to the lower jaw and inside of said mouth; and

- (iii) at least one connective member, said connective member designed and constructed to connect said first and second <u>curved</u> wands one to another and to allow relative positioning thereof; wherein said connective member includes an assembly designed and constructed to attach said first and second <u>curved</u> wands and facilitate translational motion of said <u>curved</u> wands with respect to one another.
- 4. (Currently Amended) The system of claim 1, wherein said probe is designed and constructed to facilitate imaging of at least a portion of an upper jaw and includes a single <u>said</u> curved array of ultrasonic transducers mounted upon a <u>said curved</u> wand, <u>wherein said curved</u> wand <u>is designed</u> and constructed to be insertable into <u>said</u> mouth of <u>said</u> patient.
- 5. (Currently Amended) The system of claim 1 wherein said position locator module includes at least one first position sensor located on said probe and at least one second position sensor located on a head of a subject said patient.
- 6. (Currently Amended) The system of claim 1 wherein said position locator module includes a first mechanical positioning mechanism designed and constructed to position said probe and a retention means designed and constructed to engage and retain a head (of a subjectsaid patient in a known position.
- 7. (Currently Amended) The system of claim 1, further including an ultrasonic coupling cushion, said cushion comprising an elastic container capable of retaining a coupling medium wherein said elastic container is designed and constructed to be insertable in asaid mouth of a subject said patient.
- 8. (Currently Amended) A method of producing an ultrasonic image of at least a portion of a jaw, the method comprising:
 - (a) providing a probe, said probe comprising at least one <u>curved wand</u> whereupon each is mounted a curved array of ultrasonic transducers, wherein at least one said curved wand is designed and constructed to be insertable into a mouth of a patient.

- (b) defining a location of said probe in six degrees of freedom by means of a position locator;
- (c) communicating said location to a central processing unit;
- (d) transmitting an ultrasonic signal from at least one of said transducers and receiving at least a portion of said ultrasonic signal at least one of said transducers; and
- (e) employing a central processing unit to;
 - receive a set of digital data pertaining to said transmitting and receiving performed by said transducers in <u>each</u> said <u>curved</u> arrays of said probe;
 - (ii) further receive from said position locator a location of said probe; and
 - (iii) transform said digital data into an image of said at least a portion of the jaw.
- 9. (Original) The method of claim 8, wherein said image is a three dimensional image.
- 10. (Currently Amended) The method of claim 8, wherein providing a probe includes providing a mandibular probe designed and constructed to facilitate imaging of at least a portion of a lower jaw and includes:
 - (i) providing a first <u>said curved</u> array of ultrasonic transducers mounted upon a first <u>said curved</u> wand, said first <u>curved</u> array of ultrasonic transducers positionable distal to the lower jaw and outside of <u>asaid</u> mouth;
 - (ii) providing a second <u>said curved</u> array of ultrasonic transducers, said second <u>curved</u> array of transducers mounted upon a second <u>said curved</u> wand, said second <u>curved</u> array of ultrasonic transducers positionable proximal to the lower jaw and inside of said mouth;
 - (iii) providing at least one connective member, said connective member designed and constructed to connect said first and second <u>curved</u> arrays one to another and to allow relative positioning thereof; and wherein said connective member includes an assembly designed and constructed to attach said first and second <u>curved</u> wands and

facilitate translational motion of said <u>curved</u> wands with respect to one another.

- 11. (Currently Amended) The method of claim 8, wherein providing a probe includes providing a maxillary probe designed and constructed to facilitate imaging of at least a portion of an upper jaw and includes a single <u>said</u> curved array of ultrasonic transducers mounted upon a <u>said curved</u> wand, <u>wherein</u> said <u>curved</u> wand <u>is</u> designed and constructed to be insertable into <u>asaid</u> mouth of <u>asaid</u> patient.
- 12. (Original) An ultrasonic coupling cushion, the cushion comprising an elastic container capable of retaining a coupling medium wherein said elastic container is designed and constructed to be insertable in a mouth of a subject.
- 13. (Original) The coupling cushion of claim 12, further comprising said coupling medium.
- 14. (Original) The coupling cushion of claim 13, wherein said coupling medium is selected from the group consisting of water, an aqueous solution, a gel and a polymer solution.
- 15. (Original) The coupling cushion of claim 12, wherein said elastic container further includes attachment device designed and constructed to engage and retain at least a portion of an ultrasonic probe.